

CLAIMS:

What is claimed is:

- 1 1. A method for processing shared data comprising:  
2 receiving a request to perform a task on shared  
3 data;  
4 creating a work item message for the task; and  
5 publishing the work item message to a messaging  
6 service.
- 1 2. The method of claim 1, wherein the task is one of an  
2 edit task and a locking task.
- 1 3. The method of claim 2, wherein the step of  
2 publishing the work item message comprises posting the  
3 work item message to an edit topic.
- 1 4. The method of claim 1, wherein the task is one of an  
2 edit task and an unlocking task.
- 1 5. The method of claim 4, wherein the step of  
2 publishing the work item message comprises posting the  
3 work item message to a transaction topic.
- 1 6. A method for processing shared data comprising:  
2 receiving a work item message from a messaging  
3 service;  
4 processing the work item message; and  
5 publishing a result to the messaging service.

1 7. The method of claim 6, wherein the step of receiving  
2 a work item message comprises consuming a work item  
3 message from an edit topic.

1 8. The method of claim 7, further comprising placing  
2 the work item message in an edit queue.

1 9. The method of claim 8, wherein the step of  
2 processing the work item message comprises:  
3 determining whether the work item message was  
4 created by a current server cluster node; and  
5 performing a request task corresponding to the work  
6 item message if the work item message was created by the  
7 current server cluster node.

1 10. The method of claim 9, wherein the step of  
2 processing the work item message further comprises:  
3 waiting until the work item message is removed from  
4 the edit queue if the work item message was not created  
5 by the current server cluster node.

1 11. The method of claim 7, wherein the work item message  
2 comprises a locking request.

1 12. The method of claim 11, wherein the step of  
2 processing the work item message comprises locking a  
3 portion of the shared data.

1 13. The method of claim 6, wherein the step of receiving  
2 a work item message comprises consuming a work item  
3 message from a transaction topic.

1 14. The method of claim 13, wherein the step of  
2 processing the work item message comprises:  
3 performing a request task corresponding to the work  
4 item message on a clone of at least a portion of the  
5 shared data.

1 15. The method of claim 13, wherein the work item  
2 message comprises an unlocking request.

1 16. The method of claim 15, wherein the step of  
2 processing the work item message comprises unlocking at  
3 least a portion of the shared data.

1 17. The method of claim 16, wherein the result comprises  
2 a modified portion of the shared data.

1 18. A method for processing shared data comprising:  
2 receiving a result from a messaging service;  
3 processing the result; and  
4 updating the shared data based on the result.

1 19. The method of claim 18, wherein the step of  
2 processing the result comprises modifying the shared data  
3 in persistent storage.

1 20. The method of claim 18, wherein the step of  
2 processing the result comprises updating the shared data  
3 in memory.

1 21. An apparatus for processing shared data comprising:  
2 receipt means for receiving a request to perform a  
3 task on shared data;  
4 creation means for creating a work item message for  
5 the task; and  
6 publication means for publishing the work item  
7 message to a messaging service.

1 22. The apparatus of claim 21, wherein the task is one  
2 of an edit task and a locking task.

1 23. The apparatus of claim 22, wherein the publication  
2 means comprises means for posting the work item message  
3 to an edit topic.

1 24. The apparatus of claim 21, wherein the task is one  
2 of an edit task and an unlocking task.

1 25. The apparatus of claim 24, wherein the publication  
2 means comprises means for posting the work item message  
3 to a transaction topic.

1 26. An apparatus for processing shared data comprising:  
2 receipt means for receiving a work item message from  
3 a messaging service;

4 processing means for processing the work item  
5 message; and  
6 publication means for publishing a result to the  
7 messaging service.

1 27. The apparatus of claim 26, wherein the receipt means  
2 comprises means for consuming a work item message from an  
3 edit topic.

1 28. The apparatus of claim 27, further comprising means  
2 for placing the work item message in an edit queue.

1 29. The apparatus of claim 28, wherein the processing  
2 means comprises:  
3 means for determining whether the work item message  
4 was created by a current server cluster node; and  
5 means for performing a request task corresponding to  
6 the work item message if the work item message was  
7 created by the current server cluster node.

1 30. The apparatus of claim 29, wherein the processing  
2 means further comprises:  
3 means for waiting until the work item message is  
4 removed from the edit queue if the work item message was  
5 not created by the current server cluster node.

1 31. The apparatus of claim 27, wherein the work item  
2 message comprises a locking request.

1 32. The apparatus of claim 31, wherein the processing  
2 means comprises means for locking a portion of the shared  
3 data.

1 33. The apparatus of claim 26, wherein the receipt means  
2 comprises means for consuming a work item message from a  
3 transaction topic.

1 34. The apparatus of claim 33, wherein the processing  
2 means comprises:  
3 means for performing a request task corresponding to  
4 the work item message on a clone of at least a portion of  
5 the shared data.

1 35. The apparatus of claim 33, wherein the work item  
2 message comprises an unlocking request.

1 36. The apparatus of claim 35, wherein the processing  
2 means comprises means for unlocking at least a portion of  
3 the shared data.

1 37. The apparatus of claim 36, wherein the result  
2 comprises a modified portion of the shared data.

1 38. An apparatus for processing shared data comprising:  
2 receipt means for receiving a result from a  
3 messaging service;  
4 processing means for processing the result; and  
5 update means for updating the shared data based on  
6 the result.

1 39. The apparatus of claim 38, wherein the processing  
2 means comprises means for modifying the shared data in  
3 persistent storage.

1 40. The apparatus of claim 38, wherein the processing  
2 means comprises means for updating the shared data in  
3 memory.

1 41. A computer program product, in a computer readable  
2 medium, for processing shared data comprising:  
3 instructions for receiving a request to perform a  
4 task on shared data;  
5 instructions for creating a work item message for  
6 the task; and  
7 instructions for publishing the work item message to  
8 a messaging service.

1 42. A computer program product, in a computer readable  
2 medium, for processing shared data comprising:  
3 instructions for receiving a work item message from  
4 a messaging service;  
5 instructions for processing the work item message;  
6 and  
7 instructions for publishing a result to the  
8 messaging service.

1 43. A computer program product, in a computer readable  
2 medium, for processing shared data comprising:

3 instructions for receiving a result from a messaging  
4 service;  
5 instructions for processing the result; and  
6 instructions for updating the shared data based on  
7 the result.

2025-04-04 14:00:00